Banking for the unbanked
With P2P lending & ACS technology

Brief overview on P2P Lending & Alternative Credit Scoring (ACS)

Since the 2008 financial crisis, banks had stopped lending money as freely as they had in the past, resulting in fewer loan options for potential borrowers. Low-interest rates offered became unattractive, setting investors looking for alternative sources of investments with better returns[1]. Consequently, Peer-To-Peer (P2P) lending platforms emerged, where it was once an untapped space of connecting borrowers and lenders to provide more efficient loaning processes, as well as attractive and flexible terms for both borrowers and lenders. As a result of this innovation, the 'default' middleman i.e. traditional banks, were removed from the loaning ecosystem.

To complement the P2P lending business model, the Alternative Credit Scoring (ACS) is thus developed as traditional scoring models were unable to score thin-file consumers, who have little to no credit history data. Such a model typically leverages on non-traditional data such as rent, utility payments and social media usage[2].

Unbanked population in Southeast Asia

This literature seeks to delve deeper into the P2P Lending scene which are supported by ACS in Southeast Asia. In 2018, ~ 47% (about 659 million[3]) of the population are unbanked with some individual countries sitting at staggering unbanked rates; 77% in Philippines, 65% in Vietnam, 52% in Indonesia. Having precluded from loan offers by traditional financial institutions, this had taken away a lot of opportunities for the unbanked which seek to bring themselves to higher economic standing.

This allows P2P lending platforms to bridge the gap due to their ability to offer smaller loans on more flexible terms. With increasing internet penetration in Southeast Asia, digitisation via mobile services could see quicker uptake by the unbanked at a lower cost.

P2P lending platform and ACS – how do they work hand-in-hand?

Illustration showing ecosystem consisting of P2P platforms, ACS firms and data aggregator)
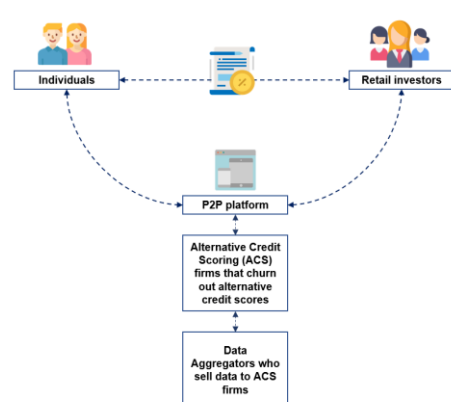

Within the P2P ecosystem, unbanked individuals and retail investors make up the demand and supply of P2P lending respectively. Individuals typically indicate their interests to borrow on P2P lending platforms by stating their preferred loan amount as well as loan terms. The P2P lending platform, which acts as an intermediary would process the borrowers' request by checking against the credit score in their system to churn out a lending rate. On the other side, investors are required to register themselves; net worth, annual income and other personal data and investment amount[4] on the platform. Upon verification on both parties' identities and documents, funds from retail investors would be disbursed to the approved borrowers.

Alternative Credit Scoring Model

Taking a closer look at the intermediary, the ACS firms are responsible for the provision of non-traditional data (alternative data). It is utilized to churn out an alternative credit score for the purpose of credit assessment by the P2P lending platforms. Alternative data take on various forms: ranging from rent, utility payments to cellphone and social media usage. Such data can be collected by ACS firms themselves or from the 'Data Aggregators' who source data from open source databases before reformatting and selling the data to ACS firms.

With these valuable data on hand, further actions are taken to extract consumers behaviors. Big data analytics and machine learning are the common technologies utilized to create these credit scores. In this literature, we seek to cover another method, Logistic Regression. Data is first taken from a historical starting point that precedes a future 'performance window' which is usually 18 or 24 months[5]. This data (i.e. independent consumer credit variables in the credit file) is then tested for significant statistical correlation with the dependent variable (i.e. late payment during the performance window).

Within the model, different weights are assigned to different factors relating to credit scoring which has varying degrees of influence. As illustrated in the diagram below, payment history of the applicants generally has the largest influence (hence largest weight) on the borrower's application success.
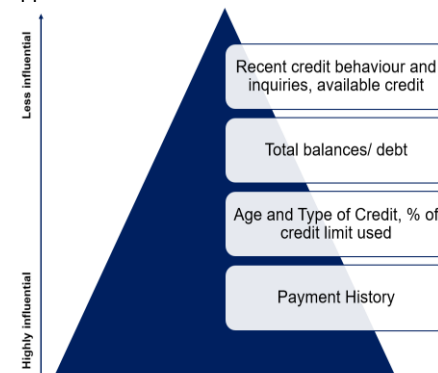
Different factors have varying degree of influence on the individual's credit score
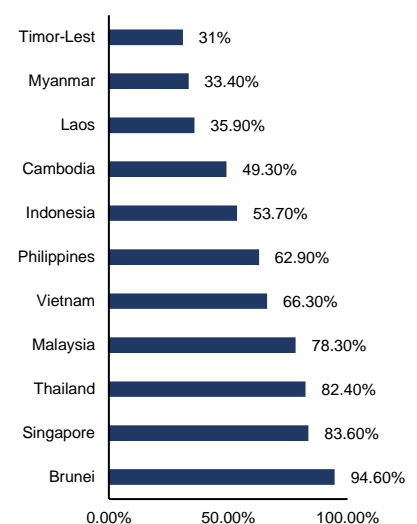
Source: Universiteit Gent[6]

Other forms of Alternative Data

Psychometric assessment, the approach of focusing on borrowers' attitudes and behaviors, has become increasingly popular in building alternative credit scores. EFL Global - a leading player in this new field of assessment, for example, evaluated potential borrowers based on applicant persona, financial skills, experience & stability[4]. This non-credit assessment method extends credit access to those who would be otherwise declined due to their absence of credit history. However, there are possible downsides related to how these borrowers' attitudes are captured. A further study conducted has revealed variance in people's responses in psychometric assessments under different scenarios: Real loan applications (high stakes) vs in a hypothetical situation with no intention to loan (low stakes). This led to an interesting and crucial finding that incumbent and prospective alternative credit scoring companies should take note: While it may be tempting to conduct psychometric tests on existing clients or volunteers in efforts to develop an alternative credit scorecard efficiently, a psychometric model's accuracy is only guaranteed when utilizing data from a high-stake situation (e.g. real loan application). As such, the creation of a robust ACS model incorporating psychometric models can be very time consuming[7] and potentially more costly than expected. P2P lenders should consider this aspect before purchasing alternative credit scoring model from ACS firms.

P2P lending scene in Southeast Asia

The huge unbanked population is not only the necessary condition for P2P lending platforms to thrive. Availability of data to evaluate customers' creditworthiness are also required. Thanks to the growing internet penetration, we have since saw increasing number of sources for data collection in SEA that have contributed to the booming scene of P2P lending platforms.

Internet Penetration in Southeast Asia as of June 2018

Country	Penetration
Timor-Lest	31%
Myanmar	33.40%
Laos	35.90%
Cambodia	49.30%
Indonesia	53.70%
Philippines	62.90%
Vietnam	66.30%
Malaysia	78.30%
Thailand	82.40%
Singapore	83.60%
Brunei	94.60%

Internet penetration in most of the SEA countries had at least exceeded 50% of the countries' populations

Source: Statista[8]

This can be substantiated with the large volume transaction within the market. In Indonesia, ~30 P2P lending platforms extended SGD 236 million of loans as of 2018[9]. With the huge influx of P2P lenders in the region, partnerships between P2P lenders and other relevant parties were even formed to tap into the opportunity that P2P lending platforms offered. An example of a partnership that has leveraged on this opportunity includes Bukalapak, an e-commerce startup who partnered with multiple P2P lending platforms to provide credit facilities to their offline agents (i.e. kiosk partners) as a mean to boost their offline sales[10].

Meanwhile, in Philippines, we a observed similar trend. P2P platform Robocash (which was integrated with its lending company, Robocash Finance Corp in December 2018) reported record volumes of financed loans within three months of integration with the lender. The skyrocketing growth was largely attributed by high demand for alternative loans which in turn is due to low financial inclusion in the country (77% unbanked as reported previously)[11].

Evaluation of P2P lending platforms

The rise of P2P lending platforms has benefited not just the unbanked, but also small & medium enterprises to gain access to capital. In 2017, 103,476 businesses raised ~US$2,230 million by utilizing online alternative finance platforms[12]. The number of SMEs that benefitted from online alternative finance in 2017 grew by 137% year-on-year and the total volume raised grew by 52% (from US$1,460 million in 2016). With the growing and proven usage of ACS, banks have since jumped on the bandwagon to include ACS as part of their credit scoring assessment.

APAC (ecl. China Total Alternative Business Finance (USD $millions) and Number of SMEs 2013-2017
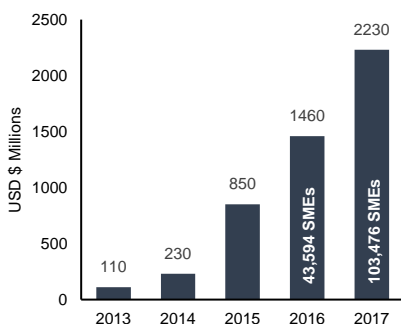

Source: Cambridge Centre for Alternative Finance[12]

While P2P lending platforms helped improve financial inclusion, unintended consequences were also observed. Given its' relatively new concept within the financial services industry, regulations to govern P2P lending platforms were almost non-existent in the past few years. The extremely lucrative market share offered has led to the burgeoning of new P2P lending platforms, both legal and illegally.

Crackdown on China

The crackdown on illegal P2P lending platforms in China best illustrates this phenomenon. China's Operation Fox Hunt has resulted in the arrest of 62 Chinese nationals abroad and seizure of 10 billion yuan ($1.5 billion) in assets from 380 unlawful P2P lending platforms[13]. Within a short span of 5 years, outstanding P2P loan balances have sprung up to 1.22 trillion yuan due to the lack of regulatory oversight. The domino effect investors cashing out during the crackdown saw the collapse of thousands of platforms. This resulted in a colossal effect on China's society given the large number of retail investors involved in the scandal.

"More than 400 peer-to-peer lending platforms collapsed from June through August, according to Shanghai-based researcher Yingcan Group. That still leaves about 1,800, a number Chinese investment bank China International Capital Corp. expects to contract to fewer than 200 after more dominoes fall.[14]"

Failed* peer-to-peer lending platforms in China, cumulative
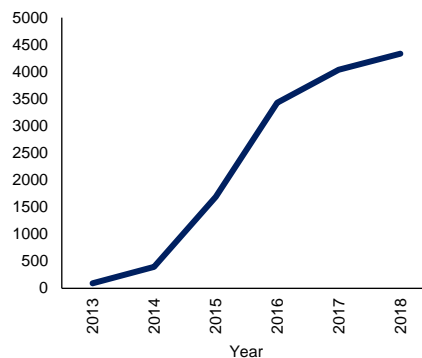
*Includes platforms that have been unable to repay investors, come under police investigation, halted operations, transformed into other businesses, or had operators flee with client funds
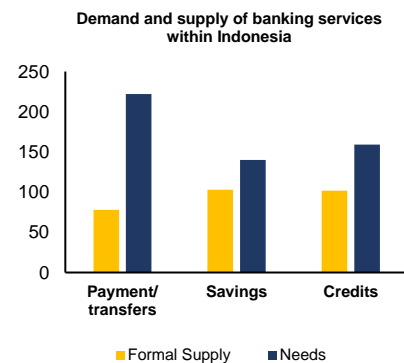
Source: Bloomberg, 2018

Gap in the current regulation

Looking at SEA, the Indonesian government had implemented lending caps of 2 billion Rupiah (equivalent to SGD $191,000) to prevent unfair, illegal P2P lending firms from budding. Minimum requirements proposed for banks and their FinTech partners include core capital of at least USD $70 million and satisfactory risk ratings[15]. However, interest rate bands are not in place for these P2P lenders[16], leading to potential issue of overcharging.

Looking forward – Growth opportunities for P2P lending platforms

Despite the challenges posed, our view on growth potential for P2P platforms remained optimistic, as we recognize the powerful role of P2P lenders in providing banking accessible to the unbanked. Market for P2P lending platforms will continue to grow, as consumers' needs were unmet by large.

Demand and supply of banking services within Indonesia

Expedited technological access have not fulfilled the gap between the supply and demand for banking in Indonesia

Source: Bloomberg[17]

This can be further substantiated given that SEA is forecasted to witness the growing internet region with a CAGR of 14% for the next 5 years alongside a rapidly growing middle-class population.

Suggestions to improve current processes

As mentioned, even with government regulations in place, Indonesia still observed an influx of illegal P2P lenders resulting in exorbitant interests, harassment of borrowers and abuse of personal information[18]. Coupled with the ongoing issue of fraudulent P2P lenders who evasively relocate to countries with lax regulations, governments within SEA should seek concerted efforts between one another to implement uniform guidelines on P2P financing as well as proper enforcement on them to ensure the sustainability of P2P lending.

Additionally, we also recognize the importance of educating first-time borrowers and lenders on loan products, specifically those that were offered by P2P lending platforms. Given its recent introduction and hype, financial literacy courses consisting of product types and expected risks should be conducted and communicated to allow consumers to make informed decisions. This information could be conveyed by engaging local community organizations that aim to increase financial literacy among the local community. This equips borrowers and lenders with the basic information of the entire P2P-lending ball game and decreases their susceptibility to predatory practices by illegal P2P lending platforms.

Conclusion

Development of ACS models would likely be the path towards a robust P2P lending scene in the future. However, regulation and understanding of potential risk undertaken to ensure the healthy growth of the industry should not be undermined as it could possibly lead to a meltdown as witnessed in China's recent lending debacle. Bearing this in mind, P2P lending platforms & ACS models would continue to flourish and possibly be the next best innovation that the unbanked would be thankful for.

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